

## **BDNF CONCENTRATION IN ORAL FLUID IN ALZHEIMER`S DISEASE**

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Relevance: Alzheimer`s disease (AD) is a neurodegenerative pathology that develops mainly in elderly and senile people.

Disruption of BDNF transport or suppression of its production appears to be typical for people of old age.

Objective: To investigate the influence of Alzheimer`s disease on the secretion of brain factors and correlate with neuropsychological profiles.

Material and methods of research: 12 men (2) and women (10) with Alzheimer`s disease were examined. The average age of the subjects was  $76.25 \pm 4.89$ . Methods: MMSE, ADAS-COG, laboratory - BDNF was performed using the G7611 BDNF Emax (R) ImmunoAssaySystem 5 x 96 wells, BDNF Emax® Immunological test.

Results: 2 patients have mild dementia, 8 patients have moderate dementia, 2 patients have severe dementia. The average age of patients with mild dementia was  $72.0 \pm 1.0$ . The average MMSE score is  $16.7 \pm 3.4$ . Correlation analysis showed a close relationship between a pronounced decrease in memory in memory tests (ADAS-COG) and a pronounced decrease in blood BDNF content ( $r = 0.676$ ). A close statistically significant relationship was found between a low result of the recognition test and a low blood BDNF content ( $r = 0.598$ ).

Conclusion: we assume that blood BDNF is a marker of pathologically accelerated aging of the central nervous system, since low test results for mnemonic function are an indicator of severe degeneration in Alzheimer`s disease.